Thales Alenia Space in Spain’s input multiplexers (Imux) products for telecommunication payloads are embarked on the satellite fleets from most satcom operators worldwide. We offer different solutions depending on requirements and frequency band, going from aluminum combline, to invar dualmode, up to our miniaturized lightweight technology based on dielectric resonators.

/// Solutions from UHF to Q frequency band

/// Narrowband (<16 MHz) and wideband designs (>500MHz BW achievable in Ku & Ka band)

/// Ultra low frequency drift with temperature

/// Modular design allowing customized mechanical arrangements

/// Dual-input or triple-input switchable multiplexer with integrated switches and input section

COMPETITIVE ADVANTAGES

/// Reliability and heritage: over 5000 channels delivered since 1996

/// Cost efficient: 4th generation in Ku band, 3rd generation in C band and 2nd generation in Ka band

/// Optimal transfer functions for extremely abrupt selectivity and superb in-band equalization

/// Lowest mass, footprint and dimensions

/// Extremely good thermal stability, allowing excellent in-band performances
**Main Features**

**Ku Band Switchable IMUX**

/// Folded monomode cavities arrangement in a single mechanical block

/// State of the art self-equalised channel filter implementation

/// Input/output sections in coaxial or waveguide technology

/// Compact mechanical assembly with flat or stacked configuration

/// Transfer function: 10 pole pseudo elliptic with 4 transmission zeroes and 4 equalization zeroes

/// Mass (per single channel): <140 g (Ku-Band), <100 g (Ka-Band), including isolators

/// Temperature range (operational): -30°C to +80°C

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**Experience**

/// GEO telecom: Amazonas, Amos, Apstar, Arabsat, Arsat, Astra, Athena-Fidus, Bangabandhu, Chinasat, EchoStar, Express, Hispasat, Inmarsat, Kazsat, Koreasat, Telkom, Telstar, Turksat, SES, Sicral, Star One, Yamal,…

/// Telecommunications constellations: Globalstar 2, O3b

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